WHAT IS CLAIMED IS:

1. (Original) An electronically controlled, color changeable, multiple light emitting diode chip landscape lighting system, comprising:

landscape lighting housing means;

support member means disposed within said housing means and adapted for surface mounting of electrically interconnected light emitting diode chips;

a plurality of light emitting diode chips;

mounting means for attaching said light emitting diode chips to said support member;

connector assembly means adapted for mechanical and electrical support of said support member means;

electronic control means adapted for voltage control in said light emitting diode chips sufficient to cause color change of illumination emitted by said light emitting diode chips; and

activation means adapted for engaging said electronic control means so that when said system is electrically connected to a source of electrical power, said electronic control means via said connector assembly means is able to cause said light emitting diodes to become excited and emit colored light, the color of light emitted being a function of the voltage provided by said electronic control means.

2. (Original) The lighting system according to claim 1, further comprising a heat sink means within said landscape lighting housing means adapted for assisting in the dissipation of heat generated by said light emitting diode chips.

3. (Original) The lighting system according to claim 2, further comprising at least one elongated screw, and wherein said heat sink means and said connector assembly means are connected to said support member means using each said elongated screw.

4. (Original) The lighting system according to claim 1, wherein said electronic control means comprises a printed circuit assembly.

5. (Original) The lighting system according to claim 4, wherein said printed circuit assembly is made an integral part of said connector assembly means.

6. (Original) The lighting system according to claim 4, further comprising a plurality of voltage altering components configured for use with said printed circuit assembly whereby exchange of said voltage altering components will cause a change in the direct current voltage supply sent from said printed circuit assembly to said light emitting diodes and cause said light emitting diodes to emit different colors of light for a variable spectrum output.

7. (Original) The lighting system according to claim 4, further comprising an electronic circuit assembly configured for control of said printed circuit assembly.

8. (Original) The lighting system according to claim 7, wherein said electronic circuit assembly is sensitive to signals selected from a group consisting of logic flows, radio frequency signals, infrared signals, and commands propagated as signals impressed on the alternating current voltage source.

9. (Original) The lighting system according to claim 1, wherein said activation means is selected from a group consisting of logic flows, local switching, radio frequency control, infrared control, signals imposed over line voltage, and a momentary switch activated by a push button.

10. (Original) The lighting system according to claim 1, wherein said support member means is selected from a group consisting of single support members and multiple support members.

11. (Original) The lighting system according to claim 10, wherein said connector assembly means provides electrical interconnection between said multiple support members so that excitation voltage and current from said printed circuit assembly is able to reach each one of said support members.

12. (Original) The lighting system according to claim 1, wherein said mounting means further comprises electrical connection means adapted for electrically interconnecting said light emitting diode chips.

13. (Original) The lighting system according to claim 12, wherein electrical connection means comprises a plurality of whisker wires.

14. (Original) The lighting system according to claim 1, further comprising an optical system
for viewing illumination from said light emitting diode chips.

15. (Original) The lighting system according to claim 14, wherein said optical system is selected from a group consisting of reflected optical systems and refracted optical systems.

16. (Original) The lighting system according to claim 1 wherein said landscape lighting housing means is selected from a group consisting of pagoda shaped landscape lighting fixtures, spotlight landscape lighting fixtures, flood light landscape lighting fixtures, well light landscape lighting fixtures, coach light landscape lighting fixtures, carriage light landscape lighting fixtures, and landscape lighting fixtures having a light shield.

17. (Original) The lighting system according to claim 1, further comprising a transparent layer, said transparent layer being within said landscape lighting housing means in a position to cover said light emitting diode chips.

18. (Original) An electronically controlled, color changeable, multiple light emitting diode chip landscape lighting system, comprising:

landscape lighting housing means;

support member means disposed within said housing means and adapted for surface mounting of electrically interconnected light emitting diode chips;

a plurality of light emitting diode chips;

mounting means for attaching said light emitting diode chips to said support member;

heat sink means within said landscape lighting housing means adapted for assisting in the dissipation of heat generated by said light emitting diode chip;

connector assembly means adapted for mechanical and electrical support of said support member means;

electronic control means adapted for voltage control in said light emitting diode chips sufficient to cause color change of illumination emitted by said light emitting diode chips, said electronic control means comprising a printed circuit assembly; and

activation means adapted for engaging said electronic control means so that when said system is electrically connected to a source of electrical power, said electronic control means via said connector assembly means is able to cause said light emitting diodes to become excited and emit colored light, the color of light emitted being a function of the voltage provided by said electronic control means.

19. (Original) The lighting system according to claim 18, further comprising an optical system for viewing illumination from said light emitting diode chips.

20. (Original) A method for electronically controlling color change in landscape lighting systems, said method comprising the steps of:

providing at least one housing configured for landscape lighting use, at least one support member, a plurality of light emitting diode chips, mounting means, connector assembly means, electronic control means, activation means, and an electrical source of power;

positioning said support member within said housing;

surface mounting said light emitting diode chips on each said support member using said mounting means;

connecting said connector assembly means to said support member so as to provide both mechanical and electrical support of said support member;

connecting said electronic control means to said light emitting diode chips so as to provide voltage control thereof sufficient to cause color change of illumination emitted by said light emitting diode chips;

engaging said activation means with said electronic control means; and

electrically connecting said electronic control means to said source of electrical power, so that said electronic control means via said connector assembly means is able to cause said light emitting diodes to become excited and emit colored light, the color of light emitted being a function of the voltage provided by said electronic control means.

21. (Original) A lighting system comprising:

a housing having a lens for diffusing light;

a plurality of light emitting diode light sources mounted in the housing;

an electronic controller coupled to the diode light sources and adapted such that when operating controls the voltage to the diode light sources sufficient to cause the a color change of light emitted by the diode light sources; and

an activator coupled to the electronic controller to cause the electronic controller to energize the diode light sources.

22. Original) The lighting system of claim 21 wherein the light emitting diode light sources comprise the colors red, blue and green.

22. (Original) The lighting system of claim 21 wherein the activator comprises one of logic flows, local switching, radio frequency control, infrared control, signals imposed over line voltage, and a momentary switch activated by a push button.

23. (Original) The lighting system of claim 22 wherein the activator comprises a switch.

24. (Original) The lighting system of claim 23 wherein the activator is arranged to cause the lamp to radiate any one of eight colors.

25. (Original) The lighting system of claim 21 wherein the light emitting diode light sources comprise the colors white and red.

26. (Original) The lighting system of claim 25 wherein the activator is a switch arranged to cause the lamp to energize either the white light emitting diodes or the red light emitting diodes.

27. (Original) The lighting system of claim 22 wherein the activator is a switch arranged to cause the lamp to either energize light emitting diodes that cause the lamp to radiate a white light or to energize the red light emitting diodes.

28. (Original) The lighting system of claim 21 further comprising:

measuring the chromaticity of a light radiated from the lighting system when all of the light emitting diode light sources are energized; and

adjusting a duty cycle of pulses energizing the light emitting diode light sources to alter the chromaticity of the light radiated from the lighting system.

29. (Original) A method of altering the chromaticity of radiated light in a lighting system having light emitting diode light sources, comprising:

energizing the light emitting diode light sources by voltage pulses having a duty cycle;

measuring the chromaticity of a light radiated from the lighting system; and

adjusting the duty cycle of the pulses energizing selected ones of the light emitting diode light sources to alter the chromaticity of the light radiated from the lighting system.

30. (Original) The method of claim 29 wherein each of the light emitting diode light sources radiate one of the colors red, blue or green when energized.